

A Method For Evaluating The Ability Of A Compound To  
Inhibit Neurotoxicity

5 Abstract of the Disclosure

This invention provides a method for evaluating the ability of a compound to inhibit neurotoxicity which comprises (a) contacting a cell which expresses a receptor  
10 for advanced glycation end product protein and a mutant presenilin-2 protein in a cell culture and the compound; (b) determining the level of cell death in the cell culture; and (c) comparing the level of cell death determined in step (b) with the amount determined in the  
15 absence of the compound so as to evaluate the ability of the compound to inhibit neurotoxicity.

The invention also provides a method for evaluating the ability of a compound to inhibit binding of an amyloid- $\beta$   
20 peptide to a receptor for advanced glycation end product which comprises (a) contacting a cell which expresses a mutant presenilin-2 protein and a receptor for advanced glycation end product protein with amyloid- $\beta$  protein and the compound; (b) determining the amount of amyloid- $\beta$   
25 peptide bound to the cell; (c) comparing the amount of bound amyloid- $\beta$  peptide determined in step (b) with the amount determined in the absence of the compound so as to evaluate the ability of the compound to inhibit binding of the amyloid- $\beta$  peptide to the receptor for advanced  
30 glycation end product.

The invention also provides a transgenic non-human animal whose somatic and germ cells express mutant human presenilin-2 protein and human receptor for advanced  
35 glycation end product protein.